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/ Ruth Montalvo Date: 01/04/02

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Customer No. 026418  
Attorney's Docket No.: GK-OEH-120 / 500814.20021  
U.S. Application No.:  
International Application No.: PCT/DE00/02154  
International Filing Date: JULY 4, 2000 4 JULY 2000  
Priority Date Claimed: JULY 5, 1999 5 JULY 1999  
Title of Invention: METHOD FOR THE MULTI-DIMENSIONAL ANALYSIS OF A PROTEOME  
Applicant(s) for (DO/EO/US): Thomas MOORE and Anton HORN  
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Commissioner of Patents  
Washington, D. C. 20231

## INFORMATION DISCLOSURE STATEMENT

S I R:

Applicant herewith submits together with the simultaneously filed National Phase application of PCT/DE00/02154, a copy of the International Search Report (PCT/ISA/210) dated December 8, 2000 citing the following references (AA - AE)

OTHER PRIOR ART (Including Author, Title, Date, Pertinent Pages, Etc.)

- AA XP 000535656 Analytical Chemistry, US, American Chemical Society, 1OCT95, pgs. 3456-3463, Article "Comprehensive Three-Dimensional Separation of Peptides Using Size Exclusion Chromatography/Reversed Phase Liquid Chromatography/ Optically Gated Capillary Zone Electrophoresis" Alvin W. Moore, et al.
- AB XP 000960771 Analytical Biochemistry, Academic Press, San Diego, CA, 1MAY98, pgs. 349-361, Article "Comprehensive Two-Dimensional High-Performance Liquid Chromatography for the Isolation of Overexpressed Proteins and Proteome Mapping" Gregory J. Opiteck, et al.
- AC XP 000965234 Protein Science, Cambridge University Press, Cambridge, GB, 7MAR98, pgs. 706-719, Article " High Throughput Protein Characterization by Automated Reverse-Phase Chromatography/Electrospray Taden Mass Spectrometry, Axel Ducret, et al.
- AD XP 004157732 Trends in Biotechnology, NL, Elsevier, Amsterdam, 3MAR99, pgs. 121-127, Article "Proteomics: Quantitative and Physical Mapping of Cellular Proteins, Walter P. Blackstock, et al.
- AE XP 004156213 Journal of Chromatography B, Biomedical Applications, NL. Elsevier Science Publishers, 5FEB99, pgs. 191-202, Article " Proteome Analysis - I Gene Products are where the Biological Action is, Mary F. Lopez"
- AF Fraser, C. M. et al.: The minimal gene complement of Mycoplasma genitalium, Science, 1995, Oct. 20, 270 (5235), 397-403

OTHER PRIOR ART (Including Author, Title, Date, Pertinent Pages, Etc.)

- AG** Fleischmann, R. D. et al.: Whole-genome random sequencing and assembly of *Haemophilus influenzae* Rd. *Science*, 1995, July 28, 269 (5223), 496-512
- AH** Blattner, F. R. et al.: The complete genome sequence of *Escherichia coli* K-12, *Science*, 1997, Sept. 5, 277 (5331), 1453-74
- AI** Goffeau, A. et al.: Life with 6000 genes, *Science*, 1996, Oct. 25, 274 (5287), 546, 563-7
- AJ** Clark, M. S.: Comparative genomics: the key to understanding the Human Genome Project, *Bioessays*, 1999, Feb. 21 (2), 121-30;
- AK** Evans, M. J. et al.: Gene trapping and functional genomics, *Trends Genet.*, 1997, Sept. 13 (9), 370-4
- AL** McDonald, L. J., et al.: Enzymatic and nonenzymatic ADP-ribosylation of cysteins, *Mol. Cell. Biochem.*, 1994 Sept., 138 (1-2), 221-6
- AM** Baenziger, J. U.: Protein-specific glycosyltransferases: how and why they do it!, *FASEB J.*, 1994, Oct. 8 (13), 1019-25
- AN** Mimnaugh, E. G. et al.: The measurement of ubiquitin and ubiquitinated proteins, *Electrophoresis*, Feb. 1999, 20 (2), 418-28
- AO** Davis, P. J. et al.: Protein modification by thermal processing, *Allergy*, 1998, 53 (46 Suppl.), 102-5
- AP** Friedrich, G. A.: Moving beyond the genome projects, *Nat. Biotechnol.*, Oct. 1996, 14 (10), 1234-7
- AQ** Ben, R. H., et al.: Two dimensional electrophoresis, The state of the art and future directions, *Proteome Research, New frontiers in functional genomics*, Springer 1997, Chap. 2, 13-33
- AR** Rabilloud, T.: Solubilization of proteins in 2-D electrophoresis, An outline, *Methods Mol. Biol.*, 1999, 112, 9-19
- AS** Rabilloud, T. et al.: Improvement of the solubilization of proteins in two-dimensional electrophoresis with immobilized pH gradients, *Electrophoresis*, Mar.-Apr. 1997, 18 (3-4), 307-16
- AT** Staudenmann, W. et al.: Sample Handling for proteome analysis, *Electrophoresis*, May 1998, 19 (6), 901-8
- AU** Klose, J. et al.: Two-dimensional electrophoresis of proteins: an updated protocol and implications for a functional analysis of the genome, *Electrophoresis*, 1995, June 16 (6), 1034-59
- AV** James, P.: Of genomes and proteomes, *Biochem. Biophys. Res. Commun.*, 1997, Feb. 3, 231 (1), 1-6
- AW** Shevchenko, A. et al.: Linking genome and proteome by mass spectrometry: large-scale identification of yeast proteins from two-dimensional gels, *Proc. Natl. Acad. Sci. USA*, 1996, Dec. 10, 93 (25), 14440-5;
- AX** Traini, M. et al.: Towards an automated approach for protein identification in proteome projects, *Electrophoresis*, 1998, Aug. 19 (11), 1941-9
- AY** Gooley, A. A. et al.: A role for Edman degradation in proteome studies, *Electrophoresis*, 1997, June 18(7), 1068-72
- AZ** Parker, K. C. et al.: Identification of yeast proteins from two-dimensional gels: working out spot cross-contamination, *Electrophoresis*, 1998, Aug. 19 (11), 1920-32

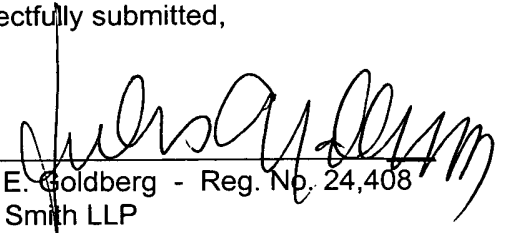
Accompanying this Information Disclosure Statement and form PTO-1449 are copies of the documents except AF - AZ.. Documents AB, AC and AF thru AZ are mentioned on pages 1 - 7 of the substitute specification.

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This submission is not an admission that the information disclosed in the documents is material to the patentability of the invention disclosed and/or claimed in the above-identified application.

Respectfully submitted,



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Enclosures:

Search Report (PCT/ISA/210);  
PTO-1449;  
5 documents

**LIST OF PRIOR ART CITED BY APPLICANT**

(Filed on January 4, 2002)

Docket No. GK-OEH-120 / 500814.20021

Applicant(s): Thomas MOORE and Anton HORN

Application No. (Int'l Appln No. PCT/DE00/02154 04JUN00) Group:

Filed:

Examiner:

#3  
Punkett  
3/2/03**U.S. PATENT DOCUMENTS**

Exam. Init	Document Number	Date	Name	Class	Sub-Class	Filing Date Appropriate

**FOREIGN PATENT DOCUMENTS**

Document Number	Date	Country	CLASS	Sub-Class	Translation YES NO

**OTHER PRIOR ART (Including Author, Title, Date, Pertinent Pages, Etc.)**

AA	XP 000535656 Analytical Chemistry, US, American Chemical Society, 1OCT95, pgs. 3456-3463, Article "Comprehensive Three-Dimensional Separation of Peptides Using Size Exclusion Chromatography/Reversed Phase Liquid Chromatography/ Optically Gated Capillary Zone Electrophoresis" Alvin W. Moore, et al.
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	<b>AN</b>	<b>Mimnaugh, E. G. et al.: The measurement of ubiquitin and ubiquitinated proteins, Electrophoresis, Feb. 1999, 20 (2), 418-28</b>
	<b>AO</b>	<b>Davis, P. J. et al.: Protein modification by thermal processing, Allergy, 1998, 53 (46 Suppl.), 102-5</b>
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Examiner:	Date:
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\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

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Copies of AF thru AZ are not available